CLAIMS:

1. An apparatus for processing a stream that contains encrypted packets of information representing a signal for at least quasi continuous rendering, the apparatus comprising

- a decryption unit arranged for applying selectable ones of a plurality of different decryption algorithms to packets representing the signal;
- an algorithm selection unit arranged to read algorithm selection information from the stream and to control dynamically which of the plurality of decryption algorithms the decryption unit applies to respective ones of the packets from the stream, dependent on the algorithm selection information.

2. An apparatus according to Claim 1, wherein at least a first and second one of the algorithms differ in robustness against unauthorized decryption.

3. An apparatus according to Claim 2, wherein the first and second one of the algorithms differ in the size of keys used in the respective algorithms.

4. An apparatus according to Claim 1, wherein the algorithm selection information selects the algorithm for respective ones of the packets individually, the algorithm selection unit controlling the decryption unit on a packet by packet basis.

5. An apparatus according to Claim 4, wherein algorithm selection unit reads the algorithm selection information for each particular packet from that packet.

6. An apparatus according to Claim 1, wherein at least a first one of the decryption algorithms requires a selectable key, the apparatus comprising a key extraction unit for extracting key values for that key from the stream and for supplying the extracted key values to the decryption unit for use as the selectable key when the first one of the decryption algorithms is used.

7. An apparatus according to Claim 6, wherein the stream comprises a decryption control code, different values of the control code selecting using a first available key values with the first one of the decryption algorithms, using a second available key values with the first one of the decryption algorithms and using a second one of the decryption algorithms respectively, the algorithm selection unit being arranged to decode the algorithm extraction information from the decryption control code.

8. An apparatus according to Claim 6, wherein the apparatus is arranged to obtain a key for use in the second decryption algorithm from outside the stream.

9. An apparatus according to Claim 1, wherein the decryption circuit comprises a pipe-line of a decryption units, for decrypting applying different ones of the decryption algorithms respectively, a front one of the decryption units in the pipe-line being arranged to pass packets undecrypted to a succeeding one of the decryption units, when the algorithm selection information indicates that the decryption algorithm applied by the front one of the decryption units need not be applied.

10. An apparatus according to Claim 1, switchable between a first and second mode of operation, the apparatus decrypting all packets of the signal in the first mode, the apparatus decrypting only packets that are decryptable with a first one of the decryption algorithms in the second mode.

11. A method of processing a stream that contains encrypted packets of information representing a signal for use in at least quasi continuous rendering, the method comprising

- reading packets that represent the signal from the stream;
- reading algorithm selection information from the stream;
- applying a selected one of a plurality of decryption algorithms to packets representing the signal, the decryption algorithm being selected for respective ones of the packets dynamically on the basis of the algorithm selection information.

12. A method according to Claim 11, wherein a first and second one of the algorithms differ in robustness against unauthorized decryption.

13. A method according to Claim 12, wherein the first and second one of the algorithms differ in the size of keys used in the respective algorithms.

14. A method according to Claim 11, wherein the algorithm selection information selects the algorithm for respective ones of the packets individually.

15. A method according to Claim 14, comprising reading the algorithm selection information for each particular packet from that packet.

16. A method according to Claim 11, wherein at least a first one of the decryption algorithms requires a selectable key, the method comprising extracting key values from the stream and using the extracted key values as the selectable key when the first one of the decryption algorithms is used.

17. A method according to Claim 16, wherein a decryption control code selects between available key values for use as selectable key for the first one of the decryption algorithms, the algorithm extraction information being decoded from the decryption control information.

18. A method according to Claim 16, comprising obtaining a key for use in the second decryption algorithm from outside the stream.

19. An apparatus for outputting a stream that contains encrypted packets of information representing a signal for at least quasi continuous rendering, the apparatus comprising

- an algorithm selection unit, for selecting at least one of a plurality of decryption algorithms by which respective ones of the packets should be decryptable, so that the required one of the decryption algorithms changes dynamically in the course of the stream;
- an encryption unit for encrypting the packets, the encryption unit being arranged to use a plurality of different forms of encryption for the packets that represent the signal, each form requiring a respective one of the decryption algorithms, the algorithm selection unit controlling which of the forms are used by the encryption unit for generating the respective ones of the packets in the stream;

- an algorithm selection information encoding unit for dynamically encoding selection information in the stream to indicate which of the decryption algorithms should be used for the packets that represent the signal.

20. An apparatus according to Claim 19, wherein at least a first and second one of the algorithms differ in robustness against unauthorized decryption.

21. An apparatus according to Claim 20, wherein the first and second one of the algorithms differ in the size of keys used in the respective algorithms.

22. An apparatus according to Claim 19, the signal being a video signal comprising independently decodable video frames and dependently decodable video frames that are decodable as updates to other video frames, wherein the algorithm selection unit is arranged to select a first one of the decryption algorithms for packets that contain no information from the independently decodable frames and a second one of the decryption algorithms for packets that contain information about the independently decodable frames.

23. An apparatus according to Claim 19, the algorithm selecting unit selecting first keys required for the first one of the decryption algorithms, the first keys varying during progress of the stream while a second key for the second one of the decryption algorithms, if any, remains the same, or changes less frequently than the first keys, the second one of the algorithms being an algorithm that is more robust against unauthorized hacking than the first one of the algorithms.

24. An apparatus according to Claim 19, wherein the algorithm selection unit is arranged to select the decryption algorithm on a packet by packet basis, the algorithm selection information encoding unit encoding the algorithm selection information for respective ones of the packets individually in the stream.

25. An apparatus according to Claim 24, wherein the algorithm selection information encoding unit is arranged to encode the algorithm selection information for each particular packet in that particular packet.

26. An apparatus according to Claim 19, wherein the encryption unit encrypts the packets for decryption with the first decryption algorithm so that successively different decryption keys are required for decryption, the packets for decryption with the second decryption requiring a non-changing key, if any, or a key that changes less frequently than the successively different decryption keys of the first decryption algorithm.

27. An apparatus according to Claim 26, wherein the second decryption algorithm is an algorithm that is more robust against unauthorized hacking than the first decryption algorithm.

28. An apparatus according to Claim 26, the algorithm selection information encoding unit including the algorithm encoding information and key selection information for selecting from available ones of the successively different decryption keys encoded together in a code, so that different values of the code select the first decryption algorithm with different available ones of the successively different decryption keys and the second decryption algorithm respectively..

29. A method of outputting a stream that contains encrypted packets of information representing a signal for use in at least quasi continuous rendering, the apparatus comprising

- selecting a plurality of different decryption algorithms by which respective ones of the packets should be decodable, so that the required one of the decryption algorithms changes dynamically in the course of the stream;
- encrypting the packets in the stream so that the selected ones of the decryption algorithms are needed for decrypting the packets;
- dynamically encoding selection information in the stream to indicate which of the decryption algorithms should be used for the packets that represent the signal.

30. A method according to Claim 29, wherein at least a first and second one of the algorithms differ in robustness against unauthorized decryption.

31. A method according to Claim 30, wherein the first and second one of the algorithms differ in the size of keys used in the respective algorithms.

32. A method according to Claim 29, the signal being a video signal comprising independently decodable video frames and dependently decodable video frames that are decodable as updates to other video frames, wherein selection of the decryption algorithm being so that a first one of the decryption algorithms is selected for packets that contain no information from the independently decodable frames and a second one of the decryption algorithms is selected for packets that contain information about the independently decodable frames.

33. A method according to Claim 32, comprising selecting first keys required for the first one of the decryption algorithms, the first keys varying during progress of the stream while a second key for the second one of the decryption algorithms, if any, remains the same, or changes less frequently than the first keys, the second one of the algorithms being an algorithm that is more robust against unauthorized hacking than the first one of the algorithms.

34. A method according to Claim 29, wherein the decryption algorithm is selected on a packet by packet basis, the algorithm selection information being encoded for respective ones of the packets individually in the stream.

35. A method according to Claim 34, wherein the algorithm selection information is encoded for each particular packet in the particular packet.

36. A method according to Claim 29, wherein the encryption unit encrypts the packets for decryption with the first decryption algorithm so that successively different decryption keys are required for decryption, a non-changing key, if any, or a key that changes less frequently than the successively different decryption keys of the first decryption algorithm being selected for the packets for decryption with the second decryption algorithm.

37. A method according to Claim 36, wherein the second decryption algorithm is an algorithm that is more robust against unauthorized hacking than the first decryption algorithm.

38. A method according to Claim 36, comprising including the algorithm encoding information and key selection information for selecting from available ones of the

successively different decryption keys encoded together in a code, so that different values of the code select the first decryption algorithm with different available ones of the successively different decryption keys and the second decryption algorithm respectively.

39. A transcrypting apparatus for transcrypting a stream that contains encrypted packets of information representing a signal for at least quasi continuous rendering, comprising

- a stream input and a stream output, for inputting and outputting the stream respectively;
- a selection unit for selecting a subset of packets from a set of packets that represent the signal;
- a decryption unit for decrypting the packets of the subset with a first decryption algorithm;
- an encryption unit for encrypting the packets of the subset with a form of encryption that requires at least a second decryption algorithm different from the first decryption algorithm;
- an algorithm selection information encoding unit for dynamically encoding selection information that indicates which of the first algorithm and at least the second decryption algorithms should be used for which of the packets that represent the signal;
- an output unit for outputting encrypted packets from the stream input that are not contained in the first subset in combination with the packets from the subset that have been encrypted with said form of encryption.

40. A transcrypting apparatus according to Claim 39, wherein the first and second algorithm differ in the size of keys used in the respective algorithms.

41. A transcrypting apparatus according to Claim 39, wherein the output unit is arranged to output packets that are not contained in the first subset as encrypted at the stream input, the output unit outputting the packets from the subset that have been encrypted with said form of encryption interspersed with the output packets that are not contained in the first subset.

42. A transcrypting apparatus according to Claim 39, the signal being a video signal comprising independently decodable video frames and dependently decodable video frames that are decodable as updates to other video frames, wherein the subset comprises all packets that contain information about the independently decodable video frames.

43. A transcrypting apparatus according to Claim 39 wherein the algorithm selection information encoding unit is arranged to encode the selection for respective ones of the packets individually.

44. A transcrypting apparatus according to Claim 39, wherein the second decryption algorithm is more robust against unauthorized hacking than the first decryption algorithm.

45. A method of transcrypting a stream that contains encrypted packets of information representing a signal for at least quasi continuous rendering, the method comprising

- receiving the stream;
- selecting a subset of packets from a set of packets that represent the signal;
- decrypting the packets of the subset with a first decryption algorithm;
- reencrypting the packets of the subset with a form of encryption that requires at least a second decryption algorithm different from the first decryption algorithm;
- encoding selection information that indicates dynamically which of the first algorithm and at least the second decryption algorithms should be used for which of the packets that represent the signal.
- replacing the packets of the subset in the stream by the reencrypted packets.

46. A method of transcrypting according to Claim 45, wherein the first and second algorithm differ in the size of keys used in the respective algorithms.

47. A method according to Claim 45, the signal being a video signal comprising independently decodable video frames and dependently decodable video frames that are decodable as updates to other video frames, wherein the subset comprises all packets that contain information about the independently decodable video frames.

48. A method according to Claim 45 wherein the algorithm selection information encoding unit is arranged to encode the selection for respective ones of the packets individually.

49. A method according to Claim 45, wherein the second decryption algorithm is more robust against unauthorized hacking than the first decryption algorithm.

50. An apparatus for processing a stream containing encrypted packets of video information from a program, the apparatus comprising

- a supply circuit for supplying first and second control words for decrypting first and second packets of video information from the program, the supply circuit periodically replacing the first control word using information from the stream while keeping the second control word unchanged during successive changes of the first control word, the supply circuit obtaining control word selection code to select which of the first and second control word will be supplied for respective ones of the packets;
- a decryption circuit arranged to decrypt packets of video information from the program with the keywords supplied by the supply circuit. .

51. An apparatus according to Claim 50, wherein the decryption circuit is arranged to apply a first and second, mutually different decryption algorithm for decryption of the packets decrypted with the first and second control word respectively, the second decryption algorithm being more robust against unauthorized hacking than the first decryption algorithm.

52. An apparatus according to Claim 50 switchable between a first mode and a second mode, so that in the first mode both first and second packets of the program are decrypted and in the second mode only second packets of the program are decrypted.

53 An apparatus according to Claim 52 wherein the apparatus has a decoding unit arranged to produce a trick play video signal of the program from the decrypted second packets in the second mode and a normal play video signal of the program from the decrypted first and second packets in the first mode.

54. An apparatus according to Claim 50, wherein the decryption circuit is arranged to distinguish between the first and second packets on the basis of information included in the packets.

55. An apparatus for transcrypting an input stream of encrypted packets of video information from a program, the apparatus comprising

- a decryption unit coupled to a stream input for receiving packets of video information from the program, the decryption unit being arranged to decrypt the packets using regularly updated first control words;
- an encryption unit coupled to the decryption unit for receiving decrypted packets and re-encrypting the packets using a second control word that does not change or changes less frequently than the first control words;
- a packet selection unit, coupled to the stream input for detecting selected packets;
- a stream forming unit coupled to the stream input, to an output of the encryption unit and the packet selection unit for forming an output stream from the input stream, wherein the selected packets are replaced by the re-encrypted packets.

56. An apparatus according to Claim 55, wherein the encryption unit is arranged to re-encrypt the packets of video information from the program with an encryption process that is more robust against unauthorized hacking than the first decryption algorithm.

57. An apparatus according to Claim 56, wherein the packet selection unit is arranged to select the selected packets according to whether the selected packets contain information of video frames that are decodable independently, without reference to other video frames.

58. An apparatus according to Claim 56, wherein the encryption unit is arranged to include in the output stream selection information to indicate for each packet individually whether a first or second decryption process should be used.

59. A stream of data that contains encrypted packets of information representing a signal for at least quasi continuous rendering, the stream comprising

- algorithm selection information indicating for interspersed packets of the signal which of a plurality of different decryption algorithms should be used for decrypting respective ones of the packets of the signal;
- packets of the signal encrypted so that different decryption algorithms have to be used for decrypting different ones of the packets.

60. A stream of data according to Claim 59, wherein the different decryption algorithms differ in the size of the keys used in the respective algorithms.

61. A stream of data according to Claim 59, wherein the algorithm selection information selects the algorithm for each of the packets individually.

62. A stream of data according to Claim 61, wherein the algorithm selection information for each particular packet is included in the particular packet.

63. A system for processing a stream that contains encrypted packets of information representing a signal for at least quasi continuous rendering, the system comprising

- an algorithm selection unit, for selecting at least one of a plurality of decryption algorithms by which respective ones of the packets should be decodable, so that the required one of the decryption algorithms changes dynamically in the course of the stream;
- an encryption unit for encrypting the packets, the encryption unit being arranged to use a plurality of different forms of encryption for the packets that represent the signal, each form requiring respective ones of the decryption algorithms, the algorithm selection unit controlling which of the forms are used for the respective ones of the packets by the encryption unit;
- an algorithm selection information encoding unit for dynamically encoding selection information in the stream to indicate which of the decryption algorithms should be used for the packets that represent the signal.
- a decryption unit arranged for applying selectable ones of a plurality of different decryption algorithm to packets representing the signal;
- an algorithm selection unit arranged to read the algorithm selection information from the stream and to control dynamically which of the plurality of decryption algorithms the decryption unit applies to respective ones of the packets from the stream, dependent on the algorithm selection information.